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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,066	10/29/2003	David S. Benco	LUTZ 2 00212	5949

48116 7590 02/25/2008  
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EXAMINER
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SHEDRICK, CHARLES TERRELL

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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02/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/696,066

Applicant(s)

BENCO ET AL.

Examiner

Charles Shedrick

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see Appeal Brief, filed 10/17/07, with respect to the rejection(s) of claim(s) 10-18, 21-24 and 30 under USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hanson US Patent Pub. No.: 20030083067.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-9, and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 5930700 to David J. Pepper (Pepper) et al. in view of U.S. Publication No.

2002/0111153 A1 to Hartmaier et al. (Hartmaier)

Regarding claim 1, Pepper discloses a method for managing message units, the method comprising (col.2 lines 62-67, managing incoming communication): receiving a list of potential calling parties associated with a subscriber (col. 3 lines 48-51), the list including identification information regarding the listed potential calling parties (col. 3 lines 4-6, col. 3 lines 31-41); associating a priority level to each of the listed potential calling parties (col.3 lines 1-3, col. 3 lines 18-30 and col. 3 lines 44-47); and, screening calls based on at least one of a calling line identification (ANI) and a personal identification code associated with the calls and based on information included in the list of potential calling parties, on the associated priorities (abstract, figures 1,3 and 4,col.1 line 50-co1.2 line 60, col. 3 lines 6-9, col. 3 lines 12-63, col. 5 line 1- col. 6 line 11).

However, Pepper fails to disclose screening calls based on a current cost of message units.

In a similar field of endeavor, Hartmaier discloses screening calls based on a current cost of message units (pars. 72 and 79-82).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Pepper, and have calls screened based on a current cost of message units as disclosed by Hartmaier for the purpose of minimizing call cost.

Regarding claim 2, the combination of Pepper and Hartmaier discloses the method of claim 1 wherein screening calls comprises: determining that the calling party is not a listed potential caller; and assigning a low priority to the calling party (Pepper, col. 3 lines 18-30).

Regarding claim 3, the combination of Pepper and Hartmaier discloses the method of claim 1 wherein screening calls comprises: determining that the calling party is a listed potential caller; and assigning the priority associated with the listed potential caller to the calling party (Pepper, see figs. 8 and 9, col. 3 lines 18-30 and col. 9 lines 12-30).

Regarding claims 4 and 5, the combination of Pepper and Hartmaier discloses the method of claim 1 wherein screening calls comprises: determining a calling line identification (ANI) associated with the calling party; comparing the calling line identification (ANI) with the identification information of the listed potential calling parties; finding a calling line identification (ANI) in the list of potential calling parties that matches the calling line identification (ANI) associated with the calling party; and assigning a priority level associated with the calling line identification found in the list of potential calling parties to the calling party (Pepper, see figures 12A and 12B, col. 3 lines 18-47, col. 6 lines 12-29, col. 10 lines 47-59, and col. 11 line 51- col. 12 line 20).

Regarding claim 6-9, Pepper discloses the method of claim 1 wherein screening calls comprises: completing the requested call to a mobile device of the subscriber if the priority level of the calling party is high (Pepper, col. 3 lines 24-26 and col. 9 lines 26- 30).

However, Pepper fails to disclose wherein screening calls comprises: completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted, requesting billing information regarding the subscriber from a billing system; wherein requesting billing

information regarding the subscriber from a billing system comprises: requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber; wherein requesting billing information regarding the subscriber from a billing system comprises: requesting information regarding a current cost to the subscriber of air time.

In a similar field of invention, Hartmaier discloses disclose wherein screening calls comprises: completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted (par. 71), requesting billing information regarding the subscriber from a billing system; wherein requesting billing information regarding the subscriber from a billing system comprises: requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber(see figure 6 steps 602-604, and par. 71); wherein requesting billing information regarding the subscriber from a billing system comprises: requesting information regarding a current cost to the subscriber of air time (pars. 79-82).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Pepper by screening calls comprising completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted as disclosed by Hartmaier for the purpose of limiting usage and incurred charges.

Regarding claim 25, Pepper discloses a system operative to conserve message units for a subscriber, the system comprising: a potential caller list manager operative to receive and maintain a list of potential callers in association with priority levels of the callers, the list being associated with the subscriber; a message unit conserver operative to determine a priority of a

calling party based on the list of potential callers and a call processor operative to process a call request of the calling party based on the determined priority of the calling party (abstract, figures 1,3 and 4,col.1 line 50-co1.2 line 60, col. 3 lines 6-9, col. 3 lines 12-63, col. 5 line 1- col. 6 line 11).

However, Pepper fails to disclose a system operative to conserve message units for a subscriber comprising to determine a current message unit ration state based on a current cost of message units to the subscriber; and a call processor operative to process a call request of the calling party based the determined current message unit ration state.

Hartmaier discloses a system operative to conserve message units for a subscriber comprising to determine a current message unit ration state based on a current cost of message units to the subscriber, and operative to process call request based on determined current message unit ration state (pars. 72 and 79-82).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Pepper with the teachings Hartmaier for the purpose of proper management and eliminating undesired cost.

Regarding claims 26-29, the combination of Pepper, and Hartmaier discloses the system of claim 25 wherein the message unit conserver is operative to determine the current message unit ration state based on a current opportunity cost measured in terms of remaining message units from a basic allotment of message units in a message unit allocation period, wherein the message unit conserver is operative to determine a priority of a calling party based on the list of potential callers and to determine a current message unit ration state based on a current cost of message units to the subscriberl wherein the message unit conserver is operative

to request a current message unit billing category associated with the subscriber from a billing system, to receive the current message unit billing category and use the current billing category to determine the current message unit ration state based on a current cost of message units to the subscriber, wherein the message unit conserver is operative to request information from a billing system regarding used message unit in a current message unit billing category from an allotment of message units in the current message unit billing category associated with the subscriber, to receive the information regarding the used message units and use the information regarding the used message unit to determine the current message unit ration state (pars. 61-62, and 71).

Claims 10-18, 21-24, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of U.S. Patent No. 5,826,185 to Wise et al. (Wise) and further in view of Hanson US Patent Pub. No.: 20030083067

Regarding claims 10 and 30, Pepper discloses a method for managing air time, the method comprising (col.2 lines 62-67): receiving a list of potential calling parties associated with a subscriber (col.3 lines 1-3 and col. 3 lines 48-51), the list including identification information regarding the listed potential calling parties(col. 3 lines 4-6, and col. 3 lines 31-41); associating a priority level with each of the listed potential calling parties( col. 3 lines 18-30 and col. 3 lines 44-47); receiving a call request from a calling party directed at user equipment of the subscriber; determining a priority level associated with the calling party; and processing the call request according to the priority level of the calling party (abstract, figures 1,3 and 4, col.1 line 50-col. 2 line 60, col. 3 lines 6-9, col. 3 lines 12-63, and col. 5 line 1- col. 6 line 11).

However, Pepper fails to disclose the method of managing air time comprising: determining a current air time ration state associated with the subscriber; and processing the call request



according to the current ration state.

In a similar field of endeavor, Wise discloses the method of managing air time comprising: determining a current air time ration state associated with the subscriber; and processing the call request according to the current ration state (see abstract, col.1 line 61- col. 2 line 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify method of managing air time of Pepper with the teaching of Wise for the purpose of allowing, forbidding, and limiting communications access with accounts for managing usage air time.

However, Pepper as modified by Wise does not specifically address managing incoming and outgoing air time.

In analogous art, Hanson teaches managing incoming and outgoing air time (e.g., see at least paragraphs 0019).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pepper as modified by Wise to include managing incoming and outgoing air time for the purpose of mitigating credit risk as taught by Hanson in paragraph 0015

Regarding claim 11, the combination of Pepper and Wise and Hanson discloses the method of claim 10 wherein determining the priority level associated with the calling party comprises: determining that the calling party is not a listed potential caller; and assigning a low priority to the calling party (Pepper, col. 3 lines 18-30).

Regarding claim 12, the combination of Pepper and Wise and Hanson discloses the method of claim 10 wherein determining the priority level associated with the calling party comprises: determining that the calling party is a listed potential caller; and assigning the priority associated

with the listed potential caller to the calling party (Pepper, see figs. 8 and 9, col. 3 lines 18-30 and col. 9 lines 12-30).

Regarding claims 13, and 14, the combination of Pepper and Wise and Hanson discloses the method of claim 10 wherein determining the priority level associated with the calling party comprises: determining a calling line identification associated with the calling party; comparing the calling line identification with the identification information of the listed potential calling parties; finding a calling line identification in the list of potential calling parties that matches the calling line identification associated with the calling party; and assigning a priority level associated with the calling line identification found in the list of potential calling parties to the calling party (Pepper, see figures 12A and 12B, col. 3 lines 18-47, col. 6 lines 12-29, col. 10 lines 47-59, and col. 11 line 51-col. 12 line 20).

Regarding claim 15, the combination of Pepper and Wise and Hanson discloses the method of claim 10 wherein determining the current air time ration state associated with the subscriber comprises: determining a remaining air time allocation period fraction associated with the subscriber; determining a remaining air time allocation fraction associated with the subscriber; determining a remaining air time allocation period to air time allocation fraction ratio associated with the subscriber; and, determining the current air time ration state based on the air time allocation period to air time allocation fraction ratio (Wise, see figure 2e steps 402-408, figure 2f steps 501-504, col. 4 lines 26-56, and col. 5 lines 42-48).

Regarding claims 16, 18 and 21, Pepper discloses the method of claim 10 wherein processing the call according to the priority level and completing the requested call to a mobile device of the subscriber if the priority level of the calling party is high; and connecting the calling party to a

message service if the priority level of the calling party is low (Pepper, col. 3 lines 24-30).

However, Pepper fails to disclose wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state based on a function of remaining allocated air time in an air time allocation period and connecting the calling party to a message service if the current ration state is at a maximum restriction.

Wise et al. discloses wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state based on a function of remaining allocated air time in an air time allocation period (col. 1 line 61-col. 2 line 10 and col. 3 line 15-col. 4 line 44); the current air time ration state associated with the subscriber comprises: determining a current time associated with the subscriber; determining a remaining air time allocation associated with the current time; and, determining the current air time ration state as a function of the remaining air time allocation (col. 1 line 58-col. 2 line 10, col. 3 line 15-col. 4 line 44); processing the call according to the current ration state comprises: completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted and connecting the calling party to a message service if the current ration state is at a maximum restriction (col. 2 lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Pepper with the teaching of Wise et al. for the purpose of calculating and knowing allotted air time versus available air time in order to appropriately route calls to subscriber at no additional cost.

However, Pepper as modified by Wise does not specifically address managing incoming and outgoing air time.

In analogous art, Hanson teaches managing incoming and outgoing air time (e.g., see at least paragraphs 0019).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pepper as modified by Wise to include managing incoming and outgoing air time for the purpose of mitigating credit risk as taught by Hanson in paragraph 0015. Regarding claim 17, Pepper discloses the method of claim 10. However, Pepper fails to disclose wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state based on a current subscriber cost of air time.

Wise et al. discloses wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state based on a current subscriber cost (charge) of air time (see figure 2e).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Pepper with Wise et al. for the purpose of minimizing expenses for the subscriber.

However, Pepper as modified by Wise does not specifically address managing incoming and outgoing air time.

In analogous art, Hanson teaches managing incoming and outgoing air time (e.g., see at least paragraphs 0019).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pepper as modified by Wise to include managing incoming and outgoing air time for the purpose of mitigating credit risk as taught by Hanson in paragraph 0015.

Regarding claims 22-24, Pepper discloses the method of claim 10, however, Pepper fails to disclose the method wherein determining the current air time ration state associated with the subscriber comprises: requesting billing information regarding the subscriber from a billing system, requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber, and requesting information regarding a current cost to the subscriber of air time.

Wise et al. discloses the method wherein determining the current air time ration state associated with the subscriber comprises: requesting billing information regarding the subscriber from a billing system (see figure 2e), requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber (col. 1 line 50-col. 2 line10), and requesting information regarding a current cost to the subscriber of air time (col. 5 line 61-col. 6 line 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Pepper with the teaching of Wise et al. for the purpose of determining billing process before routing calls to the subscriber.

However, Pepper as modified by Wise does not specifically address managing incoming and outgoing air time.

In analogous art, Hanson teaches managing incoming and outgoing air time (e.g., see at least paragraphs 0019).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pepper as modified by Wise to include managing incoming and

outgoing air time for the purpose of mitigating credit risk as taught by Hanson in paragraph 0015 Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Wise et al. as applied to claim 10 above, and further in view of U.S Patent No. 6745025 B1 to Albert Chow (Chow) et al. and further in view of Hanson US Patent Pub. No.: 20030083067

The combination of Pepper, and wise et al. and Hanson disclose the method of claim 18.

However, the combination fails to disclose the method wherein determining a current time comprises: determining a current day of a week, and a current time of day.

In a similar field of endeavor, Chow discloses time-of-day call forwarding in a wireless centrex services system. Chow further discloses the method wherein determining a current time comprises: determining a current day of a week, and a current time of day (col. 70 line 60-col. 71 line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Pepper, Wise et al and Hanson with the teachings of Chow for the purpose of only forwarding calls during the day and the time periods where they are no charges.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Shedrick whose telephone number is (571)-272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid Lester can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Charles Shedrick  
AU 2617  
February 19, 2008

  
LESTER G. KINCAID  
SUPERVISOR OF PATENT EXAMINERS